

Examiner's Second Action dated December 18, 2002, together with a two month time extension to extend the due date to and including May 18, 2003.

In the Claims:

Amend claims 1 and 11 as follows:

1. (Amended) A method of forming a doped polycrystalline silicon gate in a Metal Oxide Semiconductor (MOS) device formed on a top surface of a crystalline silicon substrate comprising:

a) forming an insulation layer on said top surface of the silicon substrate;
b) forming an amorphous silicon layer on top of and in contact with said insulation layer;

c) introducing a dopant in a top surface layer of said amorphous silicon layer;
and

d) irradiating said top surface layer of said amorphous silicon layer with a radiation beam to heat said top surface layer to heat said top surface layer to a temperature between 1150°C and the melting temperature of said silicon substrate to initiate explosive recrystallization of said amorphous silicon layer to transform said amorphous silicon layer into a polycrystalline silicon gate with said dopant distributed uniformly throughout said polycrystalline gate.

11. (Amended) A method of forming a doped polycrystalline silicon gate in a Metal Oxide Semiconductor (MOS) device formed on a top surface of a crystalline silicon substrate comprising:

a) forming an insulation layer on said top surface of the silicon substrate;
b) forming an amorphous silicon layer on top of and in contact with said insulation layer;

c) forming a dopant layer on top of and in contact with said amorphous silicon layer; and

d) irradiating said amorphous silicon layer with a radiation beam to heat said top